IN THE ABSTRACT

Delete the present abstract and, in its place, insert the following new abstract:

A system (20) for decoding a data stream allocated into data packets contains a control unit (54), a stream demultiplexer (26), a data buffer (48), a video decoder (40), and an audio decoder (38). Each data packet includes (i) encoded video data and a video header that contains video timing information and/or (ii) encoded audio data and an audio header that contains audio timing information. The stream demultiplexer demultiplexes and depacketizes the data packets without interrupting the control unit, sends the encoded video data to a video portion of the data buffer, and sends the encoded audio data to an audio portion of the data buffer. Video messages which deal with the video timing information and also identify where the encoded video data is stored in the video buffer portion are furnished by the stream demultiplexer for use by the control unit . Utilizing video instructions provided from the control unit as to where the encoded video data is stored in the video buffer portion, the video decoder decodes the encoded video data to produce decoded video data. The control unit is typically interrupted in response to a synchronization signal for reading the video messages provided by the system demultiplexer and for providing the video instructions to the video decoder. The audio decoder decodes the encoded audio data to produce decoded audio data.

E21